EGYPTIAN ARCHITECTURE

The History of ancient Egypt spans the period from the early predynastic settlements of the northern Nile Valley to the Roman conquest in 30 BC. The Pharaonic Period is dated from around 3150 BC, when Lower and Upper Egypt became a unified state, until the country fell under Greek rule in 332 BC. Egypt's history is split into several different periods according to the dynasty of the ruling of each pharaoh.

Timeline of Ancient Egyptian History

- Predynastic period
- Protodynastic period
- Early dynastic period
- 1st - 2nd dynasty
- Old kingdom
- 3rd - 6th dynasty
- First intermediate period
- 7th - 11th dynasty
- Middle kingdom
- 12th - 13th dynasty
- Second intermediate period
- 14th - 17th dynasty
- New kingdom
- 18th - 20th dynasty
- Third intermediate period
- 21st - 25th dynasty
- Late period
- 26th - 31st dynasty
- Persian period
- Ptolemaic period
- Graeco-roman period
- Byzantine period
- Arabic-Moslem period

PREDYNASTIC PERIOD (5000 - 3100 BC)

Predynastic period is traditionally the period between the Early Neolithic and the beginning of the Pharaonic monarchy starting with King Menes. It is generally divided into cultural periods named after the places where a certain type of Egyptian settlement was first located.
5000 BC - First evidence of people settling along the Nile Delta

4400 – 4000 BC - Barbarian culture - people practiced agriculture and domesticated sheep and goats --- known for pottery

4000 – 3500 BC - Amratian Society of Upper Egypt - first signs of hierarchical civilization

PROTODYNASTIC PERIOD (3200 – 3000 BC)

Protodynastic period refers to the period of time at the very end of the predynastic period. It is sometimes known as Late Predynastic Period or Dynasty 0. The Protodynastic period is characterized as being the time when ancient Egypt was undergoing the process of political unification, leading to a unified state during the Early Dynastic period. Furthermore, it is during this time when the Egyptian language was first being recorded in hieroglyphs.

3200 BC - Hieroglyphics developed

3110 – 2884 BC - King Menes joined Upper and Lower Egypt into one kingdom with the capitol at Memphis

EARLY DYNASTY PERIOD

(1st – 2nd Dynasties) This period immediately follows the unification of Lower and Upper Egypt. The distinctive hallmarks of ancient Egyptian civilization, such as art, architecture and many aspects of religion, took shape during the Early Dynastic period.

1st Dynasty

3000 BC - Irrigation increased farmland, people worship the sun

3000 – 2890 BC - 1st Dynasty kings buried in first royal tombs at Abydos

2920 – 2770 BC - During this time, the capitol at Memphis was founded. Papyrus was invented. Writing was used by the government. Many impressive artifacts have been found from this period.

2890 – 2686 BC - wooden coffins and corpses wrapped in resin

2nd Dynasty

2770 – 2650 BC) - After much rivalry for the throne Hetepsekhemwy won. At this time the kings disagreed over which god, Horus and Seth, was in power. This was finally settled when Khasekhemwy became ruler. He took both titles. Disorder erupted during the end of this dynasty. There could have been a civil war.

OLD KINGDOM

(3rd – 6th Dynasties) Old Kingdom is the name commonly given to the period in the 3rd millennium BC when Egypt attained its first continuous peak of civilization in complexity and achievement.
3rd Dynasty
2686 – 2648 BC
- Construction of Step pyramid at Memphis’ necropolis, Saqqara was ordered by Djoser
- Egyptians in this era worshiped their pharaoh as a god, believing that he ensured the annual flooding of the Nile that was necessary for their crops.

4th Dynasty (Golden Age)
- 2575 – 2467 BC
  - During this dynasty there was a great peace. The kings were able to put their energies in art. King Khufu’s Great pyramid of Giza was built. The first religious words were written on the walls of the royal tombs
- 2550 – 2490 BC
  - Khufu, Khephren and Menkare build great pyramids
  - Using more stoned than any other pharaoh, they built three pyramids: a now collapsed pyramid at Meidum, the Bent pyramid at Dahshur, and the Red pyramid at North Dahshur
  - However, the full development of the pyramid style of construction was reached during the building of the “great pyramids” at Giza.

5th Dynasty (Decline and Collapse)
- 2494 – 2487 BC
  - King Userkaf builds temple for sun god Ra at Abusir.
- 2465 – 2323 BC
  - For the first time high officials came from people outside of the royal family. The pyramids begin to be smaller and less solid. However, the carvings in the temples were of great quality. Papyrus scrolls from this time have been discovered.
- 2375 – 2345 BC
  - The pyramid Texts describe Osiris
- 2420 – 2258 BC
  - Pepi I and Pepi II rule – government weakens

6th Dynasty
- 2323 – 2152 BC
  - Many records of trading expeditions have been discovered from this period.
- 2160 BC
  - Capitol moves from Memphis to Herakleopolis in northern Middle Egypt – Upper Egypt controlled by Theban rulers.

FIRST INTERMEDIATE PERIOD (7th – 11th dynasties)
Often described as a “dark period” in ancient Egyptian history, spanned approximately one hundred years after the end of the Old Kingdom. The First Intermediate period was a dynamic time in history where rule of Egypt was roughly divided between two competing power bases. One resided at Herakleopolis in Lower Egypt, the other resided at Thebes in Upper Egypt.
7th and 8th Dynasties
- 2150 – 2135 BC - The political structure of the Old Kingdom collapsed. There was famine, civil disorder, and a high death rate.

9th and 10th Dynasties
- 2135 – 1986 BC - Egypt split into the north, ruled from Herakleopolis, and the south, ruled from Thebes

11th Dynasty
- 2074 – 1937 BC - Egypt was unified once again under the rule of Mentuhotep. He built an exceptional mortuary complex at Dyr al-Bahri
- 2134 – 2000 BC - capitol moved to Thebes - Egypt is reunited by Mentuhotep II
- 1985 – 1956 BC - Amenemhet I begins trade with Asia and the Aegean
- 1956 – 1911 BC - Collection of letters from a farmer to his family written describing family and agricultural life - Senusret I builds temple of Karnak at Thebes

MIDDLE KINGDOM (12th – 13th Dynasties)
The Middle Kingdom is the period stretching from the establishments of the 11th dynasty to the end of the 14 dynasty. This period also saw the beginning of rock tombs in the Valley of the Kings.

12th Dynasty
- 1937 – 1756 BC - Amenemhet moved the capitol back to Memphis. Sesostris II reorganized Egypt into 4 regions (northern and southern halves of the Nile Valley and eastern and western Delta)
- 1783 – 1539 BC - Few monuments from this period survived. Each King reigned for only a short time.

13th Dynasty
- 1786 – 1500 BC - This dynasty witnessed the slow decline of Egypt in which some of the Asiatic settlers of Amenemhet III would grasp power over Egypt as the Hyksos.

SECOND INTERMEDIATE PERIOD
(14th – 17th Dynasties) This period marks a period when Ancient Egypt fell into disarray for a second time, between the end of the Middle Kingdom and the start of the New Kingdom.
14th, 15th, 16th and 17th Dynasties

- 1700 BC - Earliest evidence of diagnostic medicine
- 1650 BC - Capitol moved to Thebes
- 1650 - 1580 BC - The Book of Dead first appear
- 1560 BC - War between Thebes and Asiatic ruler
- This dynasties had a number of strong rulers

NEW KINGDOM (18th – 20th Dynasties)
Also known as the Egyptian Empire is the period between 16th century BC and 11th century BC. It was Egypt’s most prosperous time and marked the zenith of its power.

18th Dynasty

- 1539 – 1295 BC - Thutmose I conquered parts of the Near East and Africa
  - Hatshepsut and Thutmose made Egypt a super power
- 1532 – 1327 BC - Amenhotep II began an artistic revolution
  - Akhenaten and Nefertiti began a new religion with one god
  - Tutankhamen reigned

19th Dynasty

- 1295 – 1186 BC - Seti I restored many monuments. His temple at Abydos has some of the most superior carved wall relief. Many battles and treaties were written between Egypt and Asiatic powers.
- 1279 – 1213 BC - Ramses II begins building projects – including his mortuary temple “The Ramesseum”

20th Dynasty

- 1186 – 1069 BC - Royal Tombs in the Valley of the Kings plundered

THIRD INTERMEDIATE PERIOD (21st – 25th Dynasties)
Also known as the Libyan period. This period refers to the time from the death of Pharaoh Ramesses XI to the foundation of the 26th dynasty by Psamtik I, following the expulsion of the Nubian rulers.

21st Dynasty

- 1070 – 945 BC - The kings weakened, and Egypt was no longer a world power. The capital moved from Tanis to Libyan, to Nubia, to Thebes, to Sais, and then back to Nubia and Thebes.
- 1069 – 1043 BC - Mummification techniques improved
- 984 BC - Osorkon “the elder” became the first Libyan pharaoh.

22nd, 23rd, 24th and 25th Dynasty

- 730 BC - Conquest of Egypt by Kush Kashta and then Piankhy
- 725 – 715 BC - The Nubians fell under the Assyrian invasion
  - Greeks helped re-establish order
**LATE PERIOD (26th - 31st Dynasties)**

This period refers to the last flowering of native Egyptian rulers from 26 dynasty into Persian conquests and ended with the death of Alexander the Great. It is often regarded as the last gasp of a once great culture, where the power of Egypt had diminished.

**26th Dynasty**

- **650s BC** - Psamtek I drives off Assyrian invaders and defeats Kushite kings
- **610 - 595 BC** - Nekau II begins to construct a canal from Nile to the Red Sea

**PERSIAN PERIOD**

**27th Dynasty**

- **525 - 404 BC** - Persians invaded and ruled Egypt.
- **404 BC** - Cambyses defeats the Egyptians at the Battle of Pelosium
- **510 - 497 BC** - King Darius completes the canal from the Nile to the Red Sea

**28th Dynasty**

- **404 - 399 BC** - Amyrtavios retakes Egypt from Persia

**29th and 30th Dynasty**

- **343 - 342 BC** - Artaxerxes I of Persia retakes Egypt
- **332 BC** - Alexander the Great invades Egypt
- **331 BC** - Alexandria is founded

**PTOLEMAIC PERIOD**

- **323 - 31 BC** - Alexandria became the new capital. It was home to the greatest library of the ancient world.
- Egypt was powerful until Cleopatra died. Egypt was then ruled by Rome.
- **31 BC** - Queen Cleopatra VII and Mark Anthony are defeated
- Octavian enters Egypt beginning Roman rule

**GRAECO-ROMAN PERIOD**

- **30 BC** - Cleopatra and Anthony committed suicide, Egypt was ruled by the Romans
- Egypt does not have another Egyptian ruler for 2000 years

**BYZANTINE PERIOD**

- **395 AD** - Egypt is now ruled from Constantinople and the Isis temple of Philae is closed
400 – 641 AD - Egyptian Hieroglyphic writing is no longer used—people can no longer understand its symbols

ARABIC-MUSLIM PERIOD

641 AD - Egypt conquered by Muslim Arabs
1822 AD - Rosetta Stone helps Jean Chompollion break the hieroglyphic code.

Structural Evolution of Egyptian Pyramids

TOMBS OR MASTABAS

- Those were built as "the home for eternity"
- More durable than the palaces of everyday life to withstand time
- The mastabas were portion of the tomb structure that were visible above ground
- They were rectangular tombs with a flat roof and were constructed from mud, brick or stone.
- Over the years, the interior of Mastabas became increasingly elaborate with the intention of confusing tomb robbers, and to allow more room to hold a pharaoh’s possessions for the afterlife
- With the conclusion of Zoser’s reign, the Mastaba underwent more developments. Stone replaced mud brick in construction, and two false doorways were added to the eastern face for the use of the pharaoh’s ba, meaning soul
- Mastaba is constructed with the help of the pharaoh’s architect Imhotep.
- The concept of the stone mastaba was transformed into four level tomb consisting of stacked mastabas that decreased in size as they reached the peak.
- The steps that the pyramid formed were believed to act as a ladder that the dead king took to reach the gods.

STEP PYRAMIDS

- Step pyramids were consisted of 6 mastabas on top of each other.
- The construction of these pyramids were ordered by King Zoser.
- After the creation of the first step pyramids, the design was designed to have smooth, limestone below.
- The steps of the inner pyramid were covered in hand-chiseled limestone taken from the quarries of Aswan farther down the Nile River.
- The appearance in the day of the ancient Egyptian was that of the shimmering white mountain.

BENT PYRAMID

- The construction of this pyramid was ordered by King Sneferu of the 4th Dynasty.
- This was the first structured with smooth sides.
- The slope of outside walls changed about halfway to the top.
- Originally, the pyramid’s architects planned to have a true pyramid with an angle of 60°.
• However, the angle reduced to 55˚ shortly after the construction commenced and thus required the enlargement of the base.

• At about 45 meters above the ground, the angle changed once again to a more gradual slop of 43˚

• It is from this decision that the bent pyramid derives its name.

• This change in angle allowed for a reduction in the size and number of blocks used in courses laid above 45 meters and was probably made in reaction to damage, evidence by cracks, in the inner chambers.

**TRUE PYRAMID**

• The first true pyramid was constructed for King Sneferu at Meydum.

• The burial chamber was only accessible by a small tunnel in the north face with a 28 degrees slope. The famous pyramid at Dahshur has sides that originally sloped at 54 degrees.